

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-36 (Cancelled)

Claim 37 (Previously Presented): A process for producing a modified electrolyte comprising:

contacting a solid polymer electrolyte or a precursor thereof with an amine compound;

separation of the amine-contacted solid polymer electrolyte or precursor thereof from the amine compound, followed by;

heating the resulting amine-contacted solid polymer electrolyte or precursor thereof at a temperature of from 40 to 200°C.

Claim 38 (Cancelled)

Claim 39 (Previously Presented): The process for producing the modified electrolyte according to claim 37, wherein the solid polymer electrolyte is a perfluoro polymeric electrolyte.

Claim 40 (Previously Presented): The process for producing the modified electrolyte according to claim 37, wherein the amine compound has a diffusion rate in the solid polymer electrolyte or the precursor thereof which is higher than the reaction rate with the solid polymer electrolyte or the precursor thereof.

Claim 41 (Previously Presented): The process for producing the modified electrolyte according to claim 37, wherein the amine compound is at least one compound selected from the group consisting of ammonia, alkali metal bis(trimethylsilyl)amide, sodium amide, 1-hexylamine, ethylamine, propylamine, butylamine, pentylamine, heptylamine, nonylamine, decylamine, perfluoromethylamine, perfluoroethylamine, perfluorobutylamine, perfluoropentylamine and perfluoroheptylamine.

Claim 42 (Previously Presented): A modified electrolyte obtained using the process according to claim 37.

Claim 43 (Previously Presented): An electrochemical device using the modified electrolyte according to claim 42.

Claim 44 (Previously Presented): A solid polymer electrolyte fuel cell using the modified electrolyte according to claim 42.

Claim 45 (Previously Presented): A process for producing a modified electrolyte comprising:

contacting a solid polymer electrolyte or a precursor thereof with an amine compound;

separation of the amine-contacted solid polymer electrolyte or precursor thereof from the amine compound, followed by;

contacting the resulting amine contacted solid polymer electrolyte or precursor thereof, with a base.

Claim 46 (Previously Presented): The process for producing the modified electrolyte according to claim 45, wherein the base is at least one compound selected from the group consisting of:

trimethylamine, triethylamine, pyridine, DBU (1,8-diazabicyclo[5.4.0]-7-undecane) and DBN (1,5-diazabicyclo[4.3.0]non-5-ene);

sodium hydroxide, lithium hydroxide, calcium hydroxide, aluminum hydroxide, potassium hydroxide, sodium carbonate, potassium carbonate, sodium hydrogencarbonate and sodium alkoxide;

sodium hydride, potassium hydride, calcium hydride, lithium aluminum hydride, sodium borohydride; and

butyl lithium, sodium cyclopentadienide and phenyl lithium.

Claim 47 (Previously Presented): The process for producing the modified electrolyte according to claim 45, wherein the solid polymer electrolyte is a perfluoro polymeric electrolyte.

Claim 48 (Previously Presented): The process for producing the modified electrolyte according to claim 45, wherein the amine compound has a diffusion rate in the solid polymer electrolyte or the precursor thereof which is higher than the reaction rate with the solid polymer electrolyte or the precursor thereof.

Claim 49 (Previously Presented): The process for producing the modified electrolyte according to claim 45, wherein the amine compound is at least one compound selected from the group consisting of ammonia, alkali metal bis(trimethylsilyl)amide, sodium amide, 1-hexylamine, ethylamine, propylamine, butylamine, pentylamine, heptylamine, nonylamine,

decylamine, perfluoromethylamine, perfluoroethylamine, perfluorobutylamine, perfluoropentylamine and perfluoroheptylamine.

Claim 50 (Previously Presented): A modified electrolyte obtained using the process according to claim 45.

Claim 51 (Previously Presented): An electrochemical device using the modified electrolyte according to claim 50.

Claim 52 (Previously Presented): A solid polymer electrolyte fuel cell using the modified electrolyte according to claim 50.

Claim 53 (Previously Presented): A process for producing a modified electrolyte comprising:

contacting a solid polymer electrolyte or a precursor thereof with an amine compound;

separation of the amine-contacted solid polymer electrolyte or precursor thereof from the amine compound, followed by;

heating the amine-contacted solid polymer electrolyte or precursor thereof at a temperature of from 40 to 200°C; and

contacting the amine-contacted solid polymer electrolyte or precursor thereof, with a base.

Claim 54 (Cancelled):

Claim 55 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein the solid polymer electrolyte is a perfluoro polymeric electrolyte.

Claim 56 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein the amine compound has a diffusion rate in the solid polymer electrolyte or the precursor thereof which is higher than the reaction rate with the solid polymer electrolyte or the precursor thereof.

Claim 57 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein the amine compound is at least one compound selected from the group consisting of ammonia, alkali metal bis(trimethylsilyl)amide, sodium amide, 1-hexylamine, ethylamine, propylamine, butylamine, pentylamine, heptylamine, nonylamine, decylamine, perfluoromethylamine, perfluoroethylamine, perfluorobutylamine, perfluoropentylamine and perfluoroheptylamine.

Claim 58 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein the base is at least one compound selected from the group consisting of:

trimethylamine, triethylamine, pyridine, DBU (1,8-diazabicyclo[5.4.0]-7-undecane) and DBN (1,5-diazabicyclo[4.3.0]non-5-ene);

sodium hydroxide, lithium hydroxide, calcium hydroxide, aluminum hydroxide, potassium hydroxide, sodium carbonate, potassium carbonate, sodium hydrogencarbonate and sodium alkoxide;

sodium hydride, potassium hydride, calcium hydride, lithium aluminum hydride, sodium borohydride; and  
butyl lithium, sodium cyclopentadienide and phenyl lithium.

Claim 59 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein said heating step is performed before said step of contacting with a base.

Claim 60 (Previously Presented): The process for producing the modified electrolyte according to claim 53, wherein said step of contacting with a base is performed before said heating step.

Claim 61 (Previously Presented): A modified electrolyte obtained using the process according to claim 53.

Claim 62 (Previously Presented): An electrochemical device using the modified electrolyte according to claim 61.

Claim 63 (Previously Presented): A solid polymer electrolyte fuel cell using the modified electrolyte according to claim 61.

Claim 64 (Previously Presented): The process for producing the modified electrolyte according to claim 39, wherein the perfluoro polymeric electrolyte has at least one electrolyte group or electrolyte group precursor selected from the group consisting of  $-\text{SO}_3\text{H}$  and  $-\text{SO}_2\text{F}$ .

Claim 65 (Previously Presented): The process for producing the modified electrolyte according to claim 47, wherein the perfluoro polymeric electrolyte has at least one electrolyte group or electrolyte group precursor selected from the group consisting of  $-\text{SO}_3\text{H}$  and  $-\text{SO}_2\text{F}$ .

Claim 66 (Previously Presented): The process for producing the modified electrolyte according to claim 55, wherein the perfluoro polymeric electrolyte has at least one electrolyte group or electrolyte group precursor selected from the group consisting of  $-\text{SO}_3\text{H}$  and  $-\text{SO}_2\text{F}$ .

Claim 67 (New): The process for producing the modified electrolyte according to claim 37, wherein the separation is carried out by washing the amine-contacted solid polymer electrolyte or precursor thereof.

Claim 68 (New): The process for producing the modified electrolyte according to claim 45, wherein the separation is carried out by washing the amine-contacted solid polymer electrolyte or precursor thereof.

Claim 69 (New): The process for producing the modified electrolyte according to claim 55, wherein the separation is carried out by washing the amine-contacted solid polymer electrolyte or precursor thereof.